Cancer Moonshot Scholars Diversity Program

LeeAnn Bailey, MD, PhD Board of Scientific Advisors June 15, 2022



Background

- A diverse biomedical research workforce is essential for solving the complex health challenges facing humanity, including cancer. For example:
 - Diverse cultural perspectives are essential to reach diverse communities.
 - Diverse approaches and ways of thinking support the advancement of research.
- The NCI, in alignment with NIH and the White House, seeks to attract, train and attain the best minds from diverse backgrounds.



Basic Research in Cancer Health Disparities (R03, R21, R01)



The Early Investigator Advancement Program (EIAP) Experience

Purpose

CANCER MOONSHOT

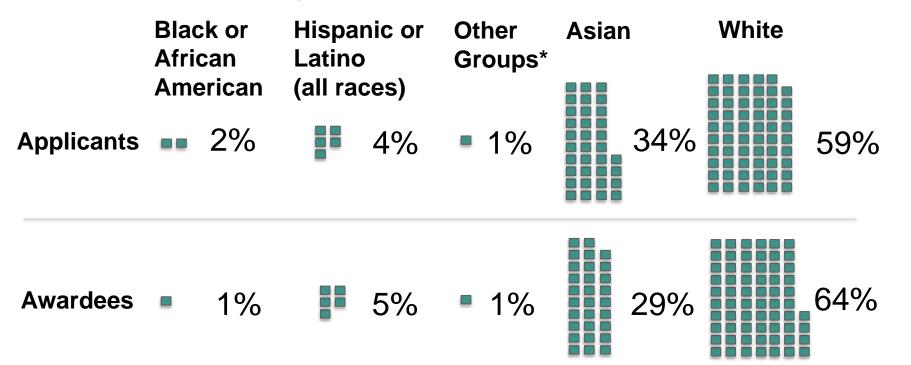
The White House's new Cancer Cabinet recently <u>announced</u> that a priority of the reignited Cancer Moonshot will be to inspire and support the next generation of diverse cancer researchers:

Cancer Moonshot Scholars Diversity Program:

- To promote scientific advances in cancer research through the diversification of the pool within the NCI R01 portfolio
- To focus on Early Stage Investigators (ESI) from underrepresented groups (URG)
- To increase the number of funded R01 investigators from URGs across the cancer research continuum

Investigators from URGs submit fewer applications and receive fewer R01 awards

Demographics of FY20 NCI R01 Equivalent PIs



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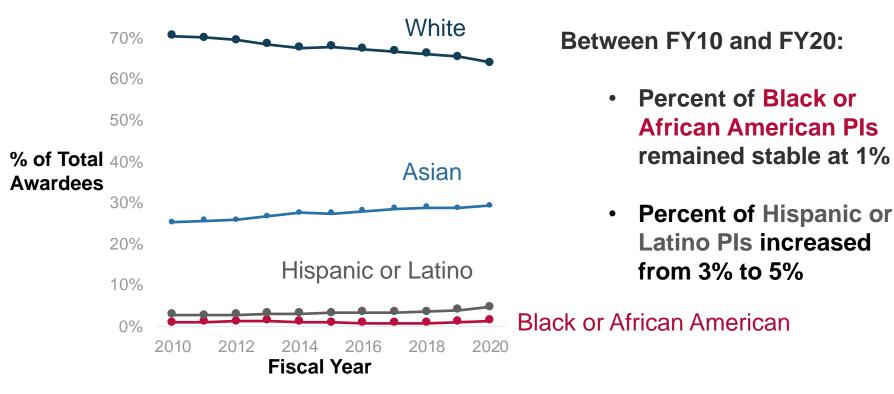
Data Source: Data from NIH OER with analysis by NCI Center for Research Strategy. **Method: Percent rounded to nearest 1%.** Percentages are calculated using the number of PIs that have self-reported their race or ethnicity (92% of all PIs). Hispanic may be any race; race categories exclude Hispanic origin.



^{*}More then one race, American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander

Trends in NCI R01 and R01 Equivalent Funding

Demographic Trends For Funded NCI R01 Equivalent Pls (FY2010- FY2020)



Data Source: Data from NIH OER with analysis by NCI Center for Research Strategy. **Method: Percent rounded to nearest 1%.** Percentages are calculated using the number of PIs that have self-reported their race or ethnicity (92% of all PIs). Hispanic may be any race; race categories exclude Hispanic origin.



Eligibility (Based on the NIH Diversity Statement NOT-OD-20-031)

- A. Individuals from racial and ethnic groups that have been shown by the National Science Foundation to be underrepresented in health-related sciences on a national basis
- B. Individuals with disabilities, who are defined as those with a physical or mental impairment that substantially limits one or more major life activities
- C. Individuals from disadvantaged backgrounds.
- D. Women from all of the above backgrounds (categories A, B, and C), who have been shown to face particular challenges at the graduate level and beyond in scientific fields

Eligibility (Continued)

- ESIs from URGs are especially encouraged to apply
- There is no restriction on the type of cancer research proposed. Applications
 proposing research topics spanning the entire cancer continuum will be
 considered responsive and aligned with the Parent R01 PA (PA-20-185).
- MPI applications are permissible, however, an investigator from a URG must be designated as the contact PI.
- An Institutional Eligibility Letter must be submitted by the applicant's
 institution certifying that the applicant is considered to be underrepresented.
 For the purpose of this RFA, investigators from URGs are defined according
 to the Notice of NIH's interest in diversity (NOT-OD-20-031).

Program Management

The Cancer Moonshot Scholars Diversity Program:

Will be led by CRCHD with trans-NCI input and participation from DCB, DCCPS, DCP, DCTD, CCT, and CRS.

- This trans-NCI steering committee will work as a team to review all R01 applications and assure appropriate DOC assignment depending on referral guidelines.
- The steering committee members will additionally contribute to outreach activities to ensure a broad range of applicants are made aware of the RFA.
 - This will include a combination of targeted solicitations to institutions and grantees, as well a broad marketing campaign using social media and other communication platforms.

Center to Reduce Cancer Health Disparities (CRCHD) Division of Cancer Biology (DCB) Division of Cancer Prevention (DCP) Division of Cancer Treatment and Diagnosis (DCTD) Steering Division of Cancer Control and Population Sciences (DCCPS) Center for Cancer Training (CCT) Center for Research Strategy (CRS)

Committee

Budget

- Allocation of funds: Cancer Moonshot
- The project period for each R01 will be up to five years
- The estimated Total Costs for the entire RFA Program is up to \$135M TC (\$78.75M DC)

	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	Total Costs
								(FY 23 – 29)
# of Type 1 Awards	15	15	15	0	0	0	0	
# of Type 5 Awards	0	15	30	45	45	30	15	
Budget (Total Costs)	\$9M	\$18M	\$27M	\$27M	\$27M	\$18M	\$9M	\$135M

^{*} ESI R01 applications with scores equivalent to or better than the NCI R01 payline will be eligible for a two-year extension.

Evaluation Criteria

- An increase in the number ESI applicants from URGs in the NCI R01 application pool
- An increase in the number of ESI awardees from URGs in the NCI R01 award pool
- The productivity of the funded R01 investigators including the number and quality of publications and scientific presentations/sessions

In addition to these short-term measures of success, we anticipate that RFA will:

- lead to a sustained long-term increase in the diversity of in R01 Type 1 and 2 awardees
- increase number of investigators from URGs in leadership positions at various institutions
- increase number of investigators from URGs engaged in cancer research
- increase the mentoring of graduate students, postdocs, and new investigators by independent investigators from URGs

(While not direct measures, these subsequent accomplishments for the R01 awardees will be tracked)

Acknowledgements

Trans-NIH WG:

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NCI Equity Council